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Nuclear

August 1, 2003

SVP-03-085

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555

> Quad Cities Nuclear Power Station, Unit 1 Facility Operating License No. DPR-29 NRC Docket No. 50-254

Subject:

Licensee Event Report 254/03-002, "Mode Change with Core Spray Loop

Inoperable due to Failure to Properly Fill and Vent"

Enclosed is Licensee Event Report (LER) 254/03-002, "Mode Change with Core Spray Loop Inoperable due to Failure to Properly Fill and Vent," for Quad Cities Nuclear Power Station, Unit 1.

This report is submitted in accordance with the requirements of the Code of Federal Regulations, Title 10, Part 50.73(a)(2)(i)(B), which requires reporting of any operation or condition which was prohibited by the plant's Technical Specifications.

Should you have any questions concerning this report, please contact Mr. W. J. Beck at (309) 227-2800.

Respectfully

Timothy J. Tulon Site Vice President

**Quad Cities Nuclear Power Station** 

cc: Regional Administrator - NRC Region III

NRC Senior Resident Inspector – Quad Cities Nuclear Power Station

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NRC FORM	1 366		U.S.	NIICI EAR RE	CIII 4	TARY			OND NO 0450 B454			4 0004	
NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION				APPROVED BY OMB NO. 3150-0104 EXPIRES 7-31-2004  Estimated burden per response to comply with this mandatory information collection request: 50									
LICENSEE EVENT REPORT (LER)					Estimated burden per response to comply with this manuality information collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to bis1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose information collection does not display a currently valid OMB control number, the NRC may not conduct or encored an agree is not required to respond to the information collection.								
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4. TITLE N	Mode Cha	nge with	Core S	Spray Loop	Inop	erable	due to	Failure	to Properly Fill and	Ver	ıt <sub>.</sub>		
5.	5. EVENT DATE 6. LER NUMBER 7. R					REPORT DATE 8. OTHER				FACILITIES INVOLVED			
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NAME Wally Bed	ck, Regula	atory Ass	urance	Manager					TELEPHONE NUMBER (I. (309) 227-2800	rchirde	Ama Car	(e)	
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16. ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On June 4, 2003, at 0114 hours, during the monthly verification of fill for the 1B Core Spray loop, air was observed from the high-point vent in excess of procedural acceptance criteria. Investigation determined a fill and vent had not been performed following a local leak rate test (LLRT) of the 1B Core Spray isolation valves on May 21, 2003. The system was inoperable from the time that the LLRT was performed until the air in the piping was removed.

On May 29, 2003, at 0353 hours, Unit 1 entered Mode 2, and at 1947 hours Unit 1 entered Mode 1. This event is being reported as operation prohibited by TS Limiting Condition for Operation 3.0.4 and Surveillance Requirement 3.0.4 due to the mode changes made while Core Spray was inoperable.

The root cause of this event was inadequate procedure adherence and coordination of work activities due to miscommunication and inadequate turnover. The safety significance of this event was minimal. The 1A loop of Core Spray and the Low Pressure Coolant Injection mode of Residual Heat Removal were operable throughout the time that the 1B Core Spray loop was required to be operable. Corrective actions include a procedure revision to verify fill each time a mode of applicability is entered.

NRC FORM 366A (7-2001)

U.S. NUCLEAR REGULATORY COMMISSION

# LICENSEE EVENT REPORT (LER)

**TEXT CONTINUATION** 

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(If more space is required, use additional copies of NRC Form 366A)(17)

#### PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor, 2957 Megawatts Thermal Rated Core Power

Energy Industry Identification System (EIIS) codes are identified in the text as [XX].

#### EVENT IDENTIFICATION

Mode Change with Core Spray Loop Inoperable due to Failure to Properly Fill and Vent

#### A. CONDITION PRIOR TO EVENT

Unit: 1

Event Date: May 29, 2003

Event Time: 0353 hours

Reactor Mode: 4

Mode Name: Cold Shutdown

Power Level: 000%

Cold Shutdown (4) - Mode switch in Shutdown position with average reactor coolant temperature < 212 degrees F.

# B. DESCRIPTION OF EVENT

On June 4, 2003, at 0114 hours, the monthly verification of fill for the 1B Core Spray [BM] loop was being performed. This verification is required by Technical Specification (TS) Surveillance Requirement (SR) 3.5.1.1. The operator performing the surveillance observed air from the high-point vent [VTV] in excess of the procedural acceptance criteria. Subsequently, the system was filled and vented and operability was re-established.

Investigation determined that a local leak rate test (LLRT) of the 1B Core Spray isolation valves [ISV] was performed on May 21, 2003. As part of the return to service process, the system is required to be filled and vented. The procedure steps that accomplish the venting of the system were not performed. The system was inoperable from the time that the LLRT was performed until the air in the piping was discovered.

On May 29, 2003, at 0353 hours, Unit 1 entered Mode 2, and at 1947 hours Unit 1 entered Mode 1. These mode changes are prohibited by Technical Specification SR 3.0.4, which states that entry into a mode shall not be made unless the SRs have been met, and by TS LCO 3.0.4, which states that entry into a mode shall not be made when a limiting condition for operation (LCO) is not met, except when the associated actions permit continued operation in that mode. Therefore, although the system was only inoperable and required to be operable from May 29, 2003, until June 4, 2003, which is less than the TS allowed outage time of 7 days, the event is being reported as operation prohibited by TS due to the mode changes made while Core Spray was inoperable.

NRC FORM 366A (7-2001) U.S. NUCLEAR REGULATORY COMMISSION

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# C. CAUSE OF EVENT

The root cause of this event was inadequate procedure adherence and coordination of work activities due to miscommunication and inadequate turnover.

### D. SAFETY ANALYSIS

The safety significance of this event was minimal. The 1A loop of Core Spray and the Low Pressure Coolant Injection (LPCI) mode of Residual Heat Removal (RHR) were operable throughout the time that the 1B Core Spray loop was required to be operable. Also, the 1B loop of Core Spray was not operated during the time that it was not filled.

#### E. CORRECTIVE ACTIONS

# Corrective Actions Completed:

Operations has instituted a program to continually reinforce fundamentals and develop leadership, providing a comprehensive approach to human performance improvement.

# Corrective Actions to be Completed:

The prerequisites in the procedure for normal unit startup will be revised to require verification of operability of Emergency Core Cooling Systems (ECCS) by venting prior to entering conditions where the systems are required to be operable.

#### F. PREVIOUS OCCURRENCES

No instances of a reportable event involving failure to perform an action due to inadequate turnover and/or miscommunication were identified during the last 2 years.

# G. COMPONENT FAILURE DATA

There were no component failures associated with this event.